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EXAMINER

ABRISHAMKAR, KAVEH

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/516,910	Applicant(s) SUH ET AL.	
	Examiner KAVEH ABRISHAMKAR	Art Unit 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7,9,10,12,14-19 and 50-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,9,10,12,14-19 and 50-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the after-final response received on July 21, 2010.
2. Claims 1, 3-5, 7, 9-10, 12, 14-19, and 50-53 are currently pending consideration.

Response to Arguments

Applicant's arguments with respect to claims 1, 3-5, 7, 9-10, 12, 14-19, and 50-53 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3- 5, 7,9,10, 12, and 14-19, and 50-53 are rejected under 35 U.S.C. 103(a) as being obvious in view of Ueda et al. (U.S. Patent 6,289,102) in view of Kanayama et al. (U.S. Patent Pub. No. US 2002/0080960).

Regarding claim 1, Ueda discloses:

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A method of recording copy protection information on a recording medium, comprising:

recording encrypted data on the recording medium (column 14, lines 19-25: *sector housing encrypted data*); and

recording copy protection information required for decrypting the encrypted data in first area and additionally in an area (column 14, lines 19-25, column 15, lines 31-45, column 16, lines 23-35: *wherein keys are recorded in different areas*), wherein the second area is separated from the main data area (column 14, lines 19-25, column 15, lines 31-45, column 16, lines 23-35: *wherein keys are recorded in different areas*); and

recording position information for indicating a position of at least the copy protection information in the second area (column 15, lines 8-20: *pointer to key information*).

Ueda does not disclose that the keys are recorded in a second area different than the first. Kanayama discloses a system made to separately record encrypted data and encryption key information in two recording areas different in recording form or recording layer from each other, for example, to record the encryption key information by means of groove wobble, magneto-optical or phase change, or to record it in another recording layer (Kanayama: paragraph 0046). It would have been obvious to do so in order to record key information in another recording area separate from the data (Kanayama: paragraph 0048).

Claim 3 is rejected as applied above in rejecting claim 1. Furthermore, Ueda discloses:

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The method set forth in claim 1, wherein the second area includes an area within a lead-in area and/or lead-out area defined in the recording medium (column 15, lines 45-60: *key information can be recorded in a lead-in area*).

Claim 4 is rejected as applied above in rejecting claim 1. Ueda does not explicitly disclose that the copy information in the first or second area is formed as a wobble pattern. Kanayama, in an analogous art, discloses that the copy protection information is formed as a wobble pattern (Kanayama: paragraph 0048). It would have been obvious to one of ordinary skill in the art to use the wobble pattern of Kanayama in the system of Ueda to record the information in different areas such as by means of a groove wobble (Kanayama: paragraph 0048).

Claim 5 is rejected as applied above in rejecting claim 1. Furthermore, Ueda discloses:

The method set forth in claim 1, wherein control information about the recording medium is recorded in the lead-in area defined in the recording medium and the control information is duplicated in an area other than the first area (column 14, lines 19-25, column 16, lines 23-35: *wherein keys are recorded in different areas*).

Regarding claim 7, Ueda discloses:

A recording medium having a data structure for managing decryption and copy protection information by a recording apparatus, comprising:

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a data area for storing encrypted data (column 14, lines 19-25: *sector housing encrypted data*);

a first area for storing copy protection information required for decrypting the encrypted data (column 14, lines 19-25, column 15, lines 31-45, column 16, lines 23-35: *wherein keys are recorded in different areas*); and

at least one second area storing a duplicate of the copy protection information (column 14, lines 19-25, column 15, lines 31-45, column 16, lines 23-35: *wherein keys are recorded in different areas*); and

a third area for storing information associated with a position where the copy protection information is recorded, wherein the position information indicates at least a position of the duplicated copy protection information (column 15, lines 8-20: *pointer to key information*).

Claim 9 is rejected as applied above in rejecting claim 7. Furthermore, Ueda discloses:

The recording medium set forth in claim 7, wherein the first and second areas include an area within a lead-in area and/or a lead-out area defined in the recording medium (column 14, lines 19-25, column 16, lines 23-35: *wherein keys are recorded in different areas*).

Claim 10 is rejected as applied above in rejecting claim 7. Ueda does not explicitly disclose that the copy information in the first or second area is formed as a wobble pattern. Kanayama, in an analogous art, discloses that the copy protection information

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is formed as a wobble pattern (Kanayama: column 7, lines 9-14). It would have been obvious to one of ordinary skill in the art to use the wobble pattern of Kanayama in the system of Ueda to record the information in different areas such as by means of a groove wobble (Kanayama: paragraph 0048).

Regarding claim 12, Ueda discloses:

A method of reproducing a recording medium, comprising the steps of:

driving the recording medium storing encrypted data (column 14, lines 19-25: *sector housing encrypted data*);

detecting copy protection information, which is required for decrypting the encrypted data, recorded repeatedly in a specific area of the recording medium or copied in a specific area from an area where original copy protection information is recorded (column 14, lines 19-25, column 16, lines 23-35: *wherein keys are recorded in different areas*); and

performing a decryption of the encrypted data based on the detected copy protection information (column 15, lines 60-67: *wherein the data is decrypted depending on the flag value*),

wherein at least the second area is separated from the main data area (column 14, lines 19-25, column 15, lines 31-45, column 16, lines 23-35: *wherein keys are recorded in different areas*), and

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the detecting step detects the copy protection information based on a position information to indicate a position where the copy protection information is recorded (column 15, lines 8-20: *pointer to key information*).

Claim 14 is rejected as applied above in rejecting claim 12. Furthermore, Ueda discloses:

The method set forth in claim 12, wherein the specific area includes an area within a lead-in area and/or lead-out area defined in the recording medium (column 15, lines 45-60: *key information can be recorded in a lead-in area*).

Claim 15 is rejected as applied above in rejecting claim 12. Furthermore, Ueda discloses:

The method set forth in claim 12, wherein the copy protection information is recorded differently depending on a manufacture of the recording medium, wherein the step (b) detects the copy protection information based on a position information to indicate a position where the copy protection information is recorded (column 15, lines 8-20: *pointer to key information*).

Claim 16 is rejected as applied above in rejecting claim 12. Furthermore, Ueda discloses:

The method set forth in claim 12, wherein the step (b) includes a step of detecting position information for at least one of the repeated copy protection

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information and reads at least one of the repeated copy protection information based on the position information (column 15, lines 8-20: *pointer to key information*).

Claim 17 is rejected as applied above in rejecting claim 12. Furthermore, Ueda discloses:

The method set forth in claim 12, wherein the step (b) includes a step of detecting position information for at least one of the repeated copy protection information stored in a predetermined position in a recording/reproducing apparatus and reads the repeated copy protection information based on the position information (column 15, lines 8-20: *pointer to key information*).

Claim 18 is rejected as applied above in rejecting claim 12. Furthermore, Ueda discloses:

The method set forth in claim 12, wherein, the step (b) detects other one among the repeated copy protection information if an error occurs in the detection of the copy protection information (column 15, lines 8-20: *pointer to key information*).

Claim 19 is rejected as applied above in rejecting claim 12. Ueda does not explicitly disclose that the copy information in the first or second area is formed as a wobble pattern. Kanayama, in an analogous art, discloses that the copy protection information is formed as a wobble pattern (Kanayama: column 7, lines 9-14). It would have been obvious to one of ordinary skill in the art to use the wobble pattern of Kanayama in the

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system of Ueda to record the information in different areas such as by means of a groove wobble (Kanayama: paragraph 0048).

Regarding claim 50, Ueda discloses:

An apparatus for reproducing data from or recording data on a recording medium, comprising:

a pickup unit configured to read data from the recording medium (column 14, lines 19-25: *sector housing encrypted data*);

a controller configured to control the pickup unit to detect copy protection information based on a position information to indicate a position where the copy protection information is recorded (column 15, lines 8-20: *pointer to key information*), the copy protection information being required for processing the copy-protected data and recorded in first area and in second area of the recording medium, the first area including original copy protection information and the second area including copied copy protection information (column 14, lines 19-25, column 15, lines 31-45, column 16, lines 23-35: *wherein keys are recorded in different areas*); and

a processor configured to process the copy-protected data using detected copy protection information (column 15, lines 60-67: *wherein the data is decrypted depending on the flag value*),

wherein the controller is configured to identify the position of the copy protection information from the position information present within a basic information unit required

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for controlling a recording or reproducing of the copy-protected data in the recording medium (column 15, lines 8-20: *pointer to key information*).

Claim 51 is rejected as applied above in rejecting claim 50. Furthermore, Ueda discloses:

The apparatus set forth in claim 50, wherein the controller is configured to control the pickup unit to detect the copy protection information from the first area (column 15, lines 8-20: *pointer to key information*).

Claim 52 is rejected as applied above in rejecting claim 50. Furthermore, Ueda discloses:

The apparatus set forth in claim 50, wherein the controller is configured to control the pickup unit to detect the copied copy protection information from the position information for indicating a position of the copied copy protection information (column 15, lines 8-20: *pointer to key information*).

Claim 53 is rejected as applied above in rejecting claim 52. Furthermore, Ueda discloses:

The apparatus set forth in claim 52, wherein the controller is configured to control the pickup unit to detect the copied copy protection information using the position information if the detection of the original copy protection information recorded in the first area fails (column 15, lines 8-20: *pointer to key information*).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAVEH ABRISHAMKAR whose telephone number is (571)272-3786. The examiner can normally be reached on Monday thru Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kaveh Abrishamkar/
Primary Examiner, Art Unit 2431

/K. A./
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